

REMARKS

Claims 1-14 are pending. By this amendment, the specification and claims 1, 4 and 8 are amended and claim 2 is cancelled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

The Office Action objects to the Specification in that the Abstract is too long. Applicants submit herewith an amended Abstract in full compliance with MPEP §608.01(b). Withdrawal of the objection of the Specification is respectfully requested.

The Office Action objects to claim 1 for a misspelling. Applicants have reviewed claim 1 and are unable to locate the identified error. Accordingly, Applicants respectfully request withdrawal of the objection to claim 1.

The Office Action rejects claims 4 and 8 under 35 U.S.C. §112, second paragraph. This rejection is respectfully traversed.

Applicants respectfully submit that amended claims 4 and 8 are in compliance with 35 U.S.C. §112. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 4 and 8 under 35 U.S.C. § 112.

The Office Action rejects claim 1 under 35 U.S.C. §102(b) as unpatentable over U.S. Patent No. 5,060,219 to Lokhoff et al. (hereinafter "Lokhoff"). This rejection is respectfully traversed.

Claim 1 recites, *inter alia*, wherein said primary recording region has a track which wobbles at a first pitch, and along which a user is able to record a data signal, and wherein said secondary recording region has a track which wobbles at a second pitch different from said first pitch or does not wobble, and along which a signal representative of control information is already prerecorded in the form of information pits at the time of the manufacture of said recording medium, wherein said control information in said secondary recording region includes an invalid key information item for inhibiting, when encrypted main data is copied into said primary recording region, reproduction of said main data.

Lokhoff is directed toward a recording system for recording only those types of information which are specified by the record carrier. Specifically, a record carrier is preconditioned with a control-information pattern indicating for which type(s) of

information such record carrier is intended. The record carrier can be of an erasable type, but the preconditioning control-information pattern is non-erasable. If a record carrier with a preformed or prerecorded servo track is used, it is advantageous to record the control-information pattern in such a servo track. Specifically, in Lokhoff, to determine the position of the track portion being scanned relative to the beginning of the servo track, a position-information signal is recorded in the form of a preformed track modulation, for example in the form of a sinusoidal modulation of the track as shown in Fig. 3(e). Thus, as discussed on column 7, lines 1-20 of Lokhoff, the preformed track modulation provides *position-information signals that represent a position information code having a length of 38 code bits.*

Applicants respectfully submit that Lokhoff at least fails to teach, suggest or disclose the above-claimed feature. Specifically, the systems and methods of Lokhoff at least fail to teach, suggest or disclose wherein said control information in said secondary recording region includes an invalid key information item for inhibiting, when encrypted main data is copied into said primary recording region, reproduction of said main data. Accordingly, Applicants respectfully submit that Lokhoff fails to teach, suggest or disclose each and every feature as set forth in claim 1. Accordingly, Lokhoff fails to anticipate claim 1. Withdrawal of the rejection of claim 1 under U.S.C. §102(b) is respectfully requested.

The Office Action rejects claims 2 and 3 under 35 U.S.C. §103(a) as unpatentable over Lokhoff. This rejection is respectfully traversed.

Applicants respectfully submit that at least based on the above arguments, Lokhoff fails to render obvious claim 3. Furthermore, the Office concedes that Lokhoff “does not expressly disclose inhibiting reproduction of said main data.” Applicants further respectfully submit that since the features of claim 2 have been incorporated into claim 1, Lokhoff fails to teach, suggest or disclose key information, and thus fails to teach, suggest or disclose invalid key information as claimed. Specifically, claim 1 recites that the invalid key information inhibits reproduction of said main data.

Applicants also respectfully submit that the motivation provided by the Office of “the desirability of enables a versatile information recording and/or reproducing systems in accordance with the advantage of the invention” is also insufficient.

Specifically, the device of Lokhoff is directed toward recording systems whereas as recited in claim 1, the invalid key information, inhibits *reproduction* of the main data.

Regarding claim 3, the Office concedes that Lokhoff “does not expressly disclose that the identification information item is required at the time of reproduction” but points to column 1, lines 44-68 and column 2, lines 1-20 of Lokhoff for this teaching. At numerous locations in Lokhoff it is expressly stated that the control information was prerecorded on the record carrier 2 (See column 5, lines 5-28). Applicants respectfully submit this is not equivalent to the time of reproduction as claimed.

Accordingly, Applicants respectfully submit that the cited reference at least fails to teach, suggest or disclose the claimed features of said secondary recording region including an identification information item required at the time of reproduction and representative of the type of said recording medium as claimed. Accordingly, Applicants respectfully submit the cited reference fails to render obvious claim 3.

Applicants respectfully submit that the cited reference fails to teach, suggest or disclose each and every feature as recited in claims 1 and 3. Accordingly, the reference fails to render obvious claims 1 and 3. Withdrawal of the rejection of claim 3 under 35 U.S.C. §103(a) is respectfully requested.

The Office Action rejects claims 4-11 under 35 U.S.C. §103(a) as unpatentable over Lokhoff and further in view of U.S. Patent No. 5,926,453 to Muramatsu et al. (hereinafter “Muramatsu”). This rejection is respectfully traversed.

The Office Action concedes that Lokhoff “does not expressly disclose a reproducing apparatus for reproduction of main data recorded in said primary recording region.” However, Applicants respectfully submit that claim 4 further recites “means for shifting said pickup in a direction toward an internal periphery of said recording medium until said pickup reaches a specific point of said secondary recording region at which said tracking error signal no longer contains a signal component having a frequency which is determined by said first pitch relating to the wobbling of said track in said primary recording region and said constant linear velocity, wherein when false control information is copied into said primary recording region said false information is ignored, and means for starting reproduction of said

main data recorded in said primary recording region according to said control information in said secondary recording region represented by an output of said pickup shifted to said point of said secondary recording region.

The Office Action points to columns 4 and 5 of Muramatsu for this teaching. For the Examiner's convenience, the cited portions of Muramatsu have been reproduced below.

The servo system 60 includes a focus servo system, a tracking servo system, a slider servo system and a spindle servo system. The focus servo system includes a focus error detecting circuit 62, a switch SW1 and a focus servo circuit 61. The tracking servo system includes a tracking error detecting circuit 64, a switch SW2 and a tracking servo circuit 63. The slider servo system includes a switch SW3 and a slider servo circuit 66. The spindle servo system includes a wobble PLL servo circuit 65, a CLV rough servo circuit 67, a switch SW4 and a spindle driver 68. The CPU 70 is connected to the disc reproducing system 30, the recording system 40, the signal processing system 50 and the servo system 60, and performs total control of these systems.

Next, an operation of the CDV-R recording apparatus will be described. Firstly, basic operation of the servo systems will be described. When the disc 31 is placed at an appropriate position, the pickup 33 is transferred to the most inner circumference of the disc 31, and the focus servo system commences focus servo control. Accordingly, light spot of the light beam emitted from the pickup 33 becomes focused state. Then, rough servo control for spindle motor 32 is carried out. Namely, based on signal output from the FG 35 and positional information output from the position sensor 34, the CLV rough servo circuit 67 controls the spindle driver 68 to rotate the spindle motor 32. The position sensor 34 detects whether the pickup 33 is in the first area of the CDV-R disc 31 or in the second area thereof. The frequency of the output signal of the FG 35 is compared with a first reference frequency when the pickup 33 is in the first area, and is compared with a second reference frequency when the pickup 33 is in the second area. The difference obtained in the comparison is operated as FG error signal. The first reference frequency corresponds to the linear velocity (1.2-1.4 m/s) in the first area of CDV while the second reference frequency corresponds to the linear velocity (11-12 m/s) in the second area of the CDV. The FG error signal indicates a difference between the reference frequency and the actual rotation frequency of the disc 31, and when the FG error signal is converged into zero, the rough servo becomes locked state. By the rough servo control described above, the

spindle motor 32 rotates at the linear velocity corresponding to the first or second reference frequency.

Applicants respectfully submit that while these portions may disclose the operation of the CDV-R recording apparatus, neither these portions nor any other portion of Muramatsu teaches, suggests or discloses the features as claimed.

Regarding claim 5, the Office Action concedes that Lokhoff “does not expressly disclose inhibiting reproducing of said main data.” As discussed above, Lokhoff fails to teach, suggest or disclose key information, and therefore invalid key information as claimed. Furthermore, Lokhoff fails to teach, suggest or disclose encrypting main data and means for canceling reproduction of said main data according to said invalid key information item as claimed.

Regarding claim 6, Applicants again respectfully submit that the cited combination of references at least fails to teach, suggest, or disclose “means for canceling, when said identification information item indicates that recording of a data signal into said primary recording region by a user is possible and, in addition, main data recorded in said primary recording region is encrypted, recording of said main data.”

Regarding claim 7, and as previously discussed, Lokhoff fails to teach, suggest or disclose any type of encrypted or unencrypted main data. Therefore, Applicants respectfully submit for at least the above reasons, and the reasons outlined traversing the rejection of claim 4, that claim 7 is not rendered obvious by the cited references.

Claims 8 recites, *inter alia*, said reproducing apparatus comprising a pickup for reading a signal from said recording medium, means for shifting said pickup in a direction toward an internal periphery of said recording medium until said pickup reaches its shift limit point, and means for starting reproduction of said main data recorded in said primary recording region according to said control information in said secondary recording region obtained finally from an output of said pickup during shifting of said pickup, wherein when false control information is copied into said primary recording region said false control information is ignored.

As previously discussed, Applicants respectfully submit there is no portion of either reference that teaches the above outlined features.

Regarding claim 9, Applicants again respectfully submit that the cited references at least fail to teach, suggest or disclose invalid key information and means for canceling as claimed.

Regarding claim 10, the Office Action concedes that Lokhoff "does not expressly disclose inhibiting reproducing of said main data." However, the Office points to Lokhoff disclosing the desirability of "enables a versatile information recording and/or reproducing systems in accordance with the advantage of the invention."

However, Applicants respectfully submit that the "desirability of a versatile information recording system" can not render obvious the specific features enumerated in claim 10.

Regarding claim 11, Applicants again respectfully submit that at least for the reasons outlined above in relation to claim 7, claim 11 is also not rendered obvious by the cited references.

Accordingly, Applicants respectfully submit that at least for the reasons outlined above, and the reasons discussed in relation to the §102 rejection, the cited references, either alone or in combination, fail to teach, suggest or disclose each and every feature as set forth in the claims. Accordingly, Applicants respectfully submit the cited references fail to render obvious claims 4-11. Withdrawal of the rejection of these claims under 35 U.S.C. §103 is respectfully requested.

Applicants respectfully submit the application is in condition for allowance. Favorable reconsideration and prompt allowance are respectfully requested.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is encouraged to contact Applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

Jason H. Vick

Registration No. 45,285

NIXON PEABODY LLP
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
Telephone: (703) 770-9300
Fax: (703) 770-9400

Marked-up version of claims

1. (Amended) A disk-shaped recording medium comprising a primary recording region and a secondary recording region which is located on the side of an internal periphery of said primary recording region,

wherein said primary recording region has a track which wobbles at a first pitch, and along which a user is able to record a data signal; and

wherein said secondary recording region has a track which wobbles at a second pitch different from said first pitch or does not wobble, and along which a signal representative of control information is already prerecorded in the form of information pits at the time of the manufacture of said recording medium, wherein said control information in said secondary recording region includes an invalid key information item for inhibiting, when encrypted main data is copied into said primary recording region, reproduction of said main data.

4. (Amended) A reproducing apparatus for the reproduction of main data recorded in a primary recording region of a disk-shaped recording medium comprising the primary recording region and a secondary recording region which is located on the side of an internal periphery of said primary recording region,

wherein said primary recording region has a track which wobbles at a first pitch, and along which a user is able to record a data signal; and

wherein said secondary recording region has a track which wobbles at a second pitch different from said first pitch or does not wobble, and along which a signal representative of control information is already prerecorded in the form of information pits at the time of the manufacture of said recording medium, wherein said control information in said secondary recording region includes an invalid key information item for inhibiting, when encrypted main data is copied into said primary recording region, reproduction of said main data [said primary recording region of said claim 1 recording medium], said reproducing apparatus comprising:

means for spinning said recording medium at a constant linear velocity;

a pickup for reading a signal from said recording medium under rotation;

means by which a signal read position by said pickup follows said tracks of said recording medium;

means for generating a tracking error signal from an output of said pickup;

means for shifting said pickup in a direction toward an internal periphery of said recording medium until said pickup reaches a specific point of said secondary recording region at which said tracking error signal no longer contains a signal component having a frequency which is determined by said first pitch relating to the wobbling of said track in said primary recording region and said constant linear velocity, [so that even] wherein when false control information is copied into said primary recording region said false control information is ignored; and

means for starting reproduction of said main data recorded in said primary recording region according to said control information in said secondary recording region represented by an output of said pickup shifted to said point of said secondary recording region.

8. (Amended) A reproducing apparatus for reproducing, from a disk-shaped recording medium comprising (a) a primary recording region into which a user is able to record a data signal and (b) a secondary recording region which is located on the side of an internal periphery of said primary recording region and into which a signal representative of control information is already prerecorded at the time of the manufacture of said recording medium, main data recorded in said primary recording region, said reproducing apparatus comprising:

a pickup for reading a signal from said recording medium;

means for shifting said pickup in a direction toward an internal periphery of said recording medium until said pickup reaches its shift limit point; and

means for starting reproduction of said main data recorded in said primary recording region according to said control information in said secondary recording region obtained finally from an output of said pickup during shifting of said pickup, [so that even] wherein when false control information is copied into said primary recording region said false control information is ignored.